S/N: 09/647,705

In The Claims

Please replace claims 1-4 as shown below. A marked up version of the amended claims is attached to this Amendment. Claim 5 has been added.

1. (Amended) A method for the identification of physiologically active peptides, the method comprising the steps of:

comparing the cDNA sequences of receptor variants of receptors having one or more variants in size, the receptors being receptive of an identical ligand and being products of the same gene, wherein there is a substance or cell present in vivo having a functional antagonism against the ligand for the receptor or against the cell which expresses the receptor of the ligand; and

identifying which cDNA sequence in the larger receptor is missing in the shorter receptor.

- 2. (Amended) A method of producing physiologically active peptides, wherein the missing region determined by the method of claim 1 is produced.
- 3. (Amended) A method of claim 2, wherein a derivative having at least 70% homology to the missing region, is produced, wherein the physiological activity of the derivative is maintained.
- 4. (Amended) A method of claim 2, wherein the missing region is synthesized by chemical synthesis.
- 5. (New) A method of claim 3, wherein the missing region is synthesized by chemical synthesis.

REMARKS

Claims 1-4 are pending. Claim 5 has been added. Favorable reconsideration is respectfully requested.